

# Washington's 2021 State Energy Strategy

(a work in progress)

---

Glenn Blackmon, PhD

MANAGER, ENERGY POLICY OFFICE

OCTOBER 30, 2020



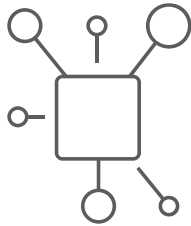
Washington State  
Department of  
**Commerce**

# We strengthen communities

---



**HOUSING  
HOMELESSNESS**



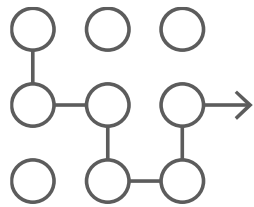
**INFRASTRUCTURE**



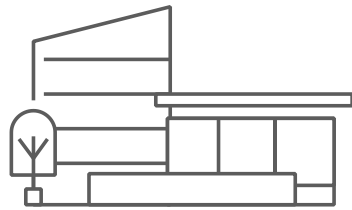
**BUSINESS  
ASSISTANCE**



**ENERGY**



**PLANNING**



**COMMUNITY FACILITIES**

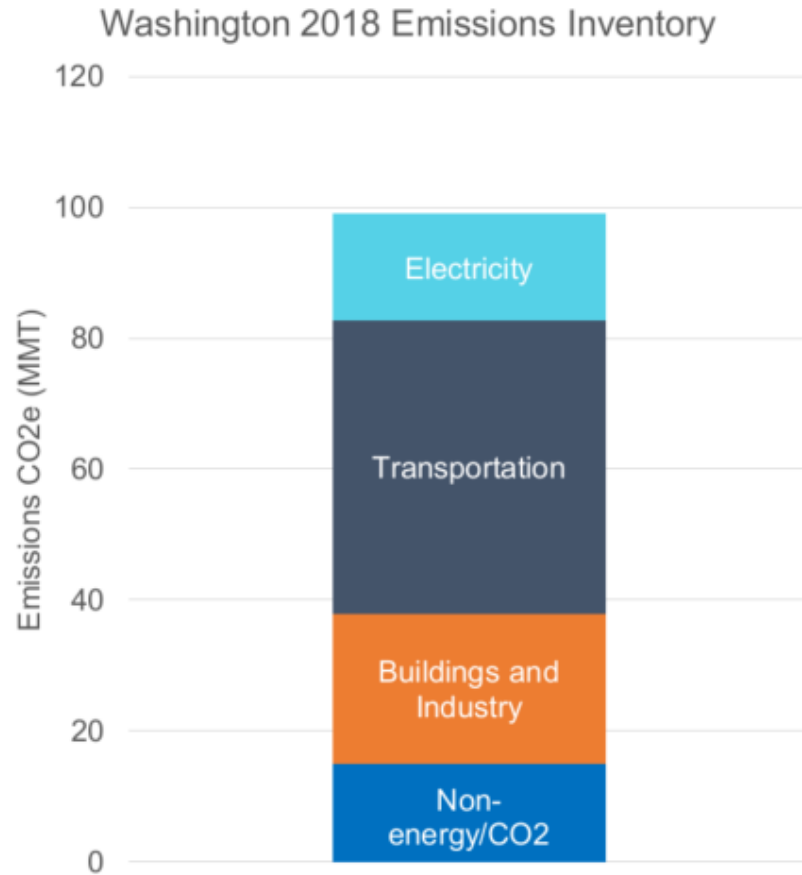


**CRIME VICTIMS &  
PUBLIC SAFETY**



**COMMUNITY  
SERVICES**

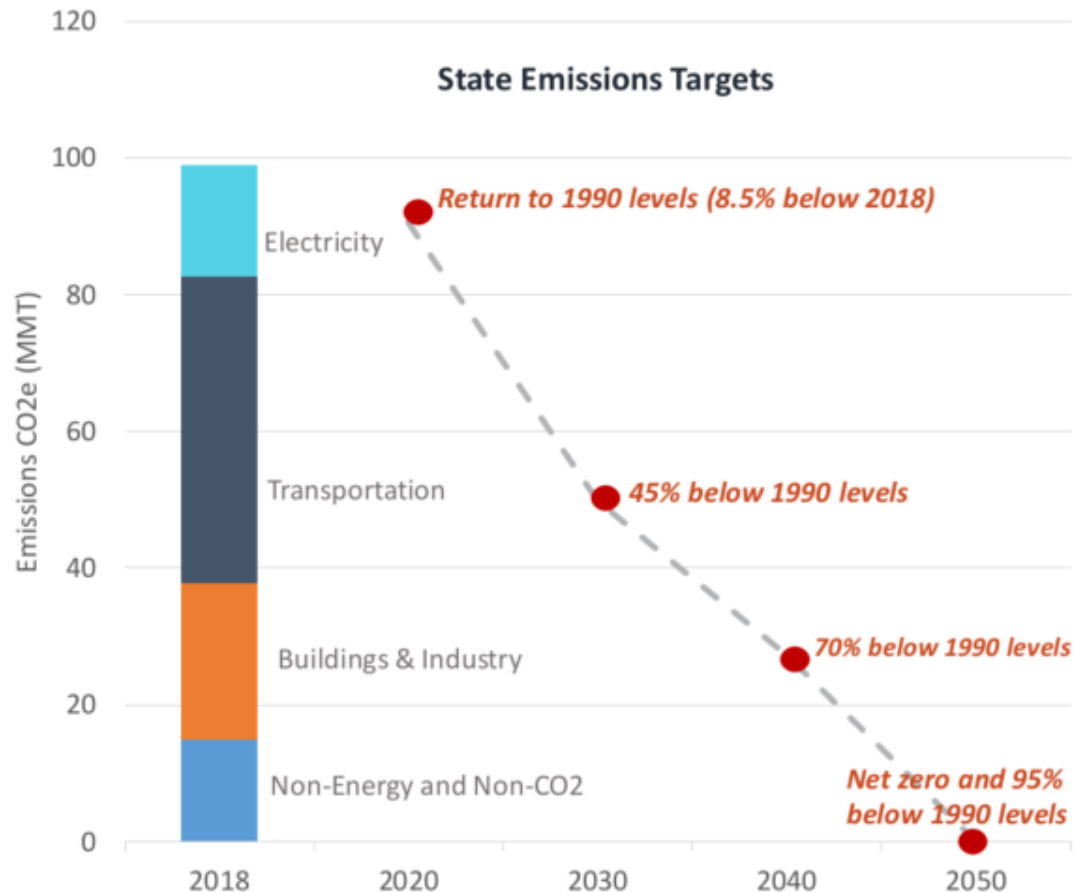
# Context: Washington's Emissions Profile



- ▶ Washington's 2018 GHG emissions were **98.9 million metric tons**, up from 90.5 MMT in 1990
- ▶ Energy related CO<sub>2</sub> emissions represent ~85% of all emissions
  - Transportation (45%)
  - Buildings and Industry (23%)
  - Electricity (16%)
- ▶ Non-energy and non-CO<sub>2</sub> emissions ~15%

Wash. State Dept. of Ecology

# The Challenge: Meeting State Emissions Reduction Targets



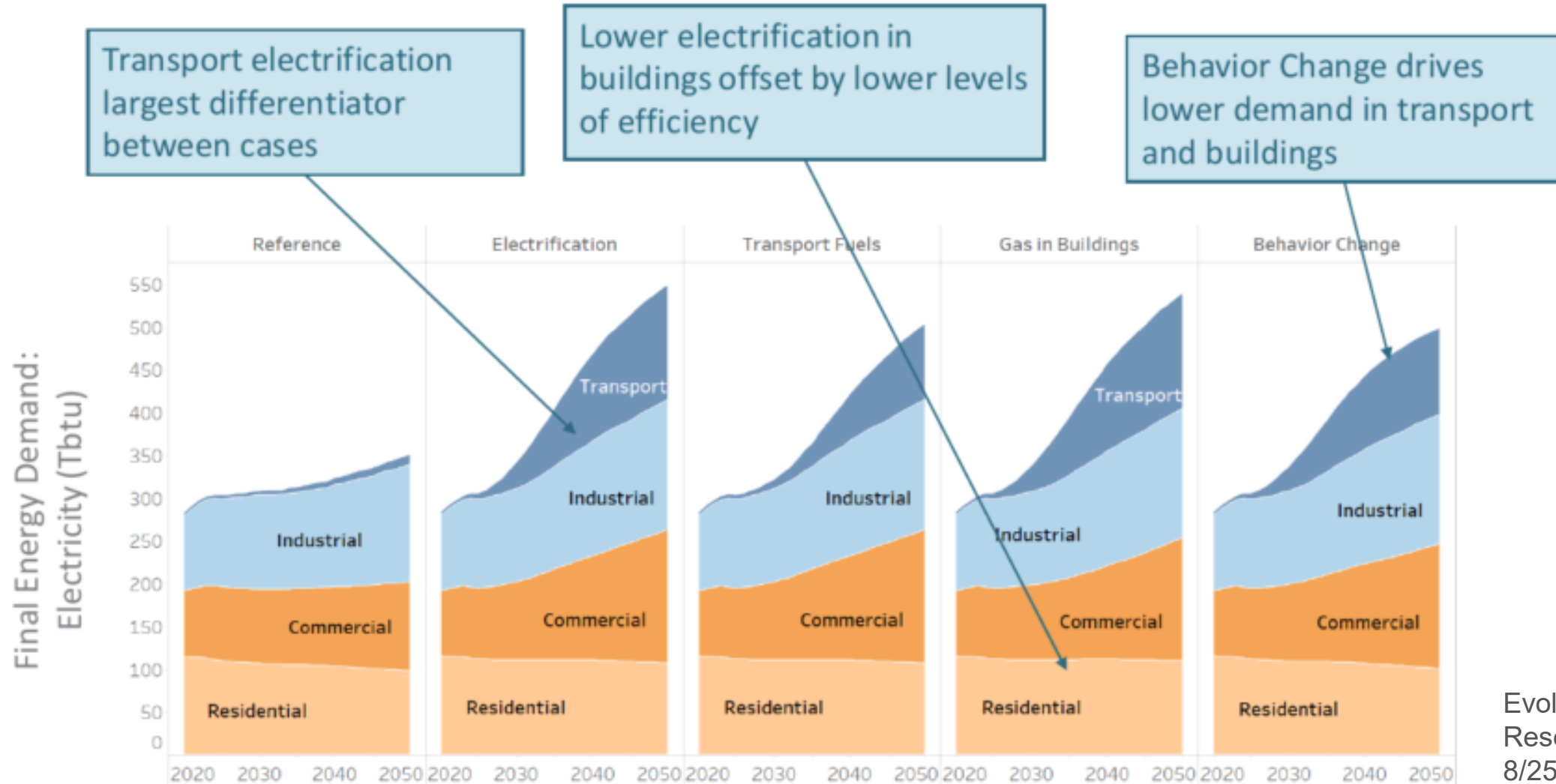
- Economy-wide
  - 95% reduction in gross emissions by 2050
  - Net zero by 2050: land-based sequestration can provide remaining 5%
- Energy
  - Energy-related emissions will likely need to decline at same pace or faster
  - Some non-energy/non-CO<sub>2</sub> sources may be more difficult to mitigate
- Challenge
  - Halving emissions in next 10 years

# Step 1: 100% Clean Electricity

---

- **Clean Energy Transformation Act (2019)**
  - No coal after 2025
  - Greenhouse gas neutral by 2030
  - 100% renewable or non-emitting by 2045
- **Eliminate emissions from the electric sector**
- **Potential replacement for direct use of fossil fuels**
  - Gasoline and diesel in transportation
  - Natural gas in buildings and industry
- **Either direct use of electricity or production of clean fuels**

# Model results: Lots of electrification



Evolved Energy Research,  
8/25/2020 draft



Washington State  
Department of  
**Commerce**

[www.commerce.wa.gov](http://www.commerce.wa.gov)



**Glenn Blackmon, PhD**

MANAGER, ENERGY POLICY OFFICE

[glenn.blackmon@commerce.wa.gov](mailto:glenn.blackmon@commerce.wa.gov)

360.339.5619

<https://www.commerce.wa.gov/energystrategy>